The Power & Potential of Research –Based Health I.T. for Behavioral Health

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Introduction

Thank you for inviting me to speak with you today. I am Dr. Dennis Morrison, Chief Executive Officer for Centerstone Research Institute (CRI) headquartered in Bloomington, Indiana with offices in Nashville, Tennessee. CRI is a relatively new entity with long roots in health information technology and healthcare research. We were formed approximately two years ago through the merger of four community mental health centers based in Indiana and Tennessee. I was proud to have served for 13 years as the CEO of one of the organizations involved in that merger, Center for Behavioral Health based in Bloomington, Indiana.

The Centerstone companies, all of which are non-profits, will see over 65,000 people for mental health and substance use disorders this year; we employ approximately 2200 people and maintain 146 facilities in Indiana and Tennessee. All of our services are community-based. We do not provide inpatient services.

The merger of our organizations has allowed us to capitalize on the skills and assets of all four organizations in ways not possible prior to the merger. All the merger partners shared a commitment to the use and development of research-based treatments for mental health and substance use disorders and in the use of health information technology. As evidence of that commitment, all four of the organizations had fully implemented Electronic Health Records at the time of the merger, and my organization had won the Health Information Management Systems Society (HIMSS) Nicholas E Davies Award for Best Implementation of EHRs. We also won the JCAHO Ernest A Codman Award for best use of outcomes measures. As a result, we were and are the only health care institution in the world to have won both of these prestigious awards.

This commitment to Research, Outcomes and Information Technology led to the development of Centerstone Research Institute by bringing together all the human talent and physical resources dedicated to research and IT from the four legacy corporations under a new non-profit company, CRI. The mission of our parent company, Centerstone, is to “Prevent and Cure Mental Illness and Addictions,” and while some may question our commitment to finding cures, we believe the time has come to set that as a goal. Keep in mind that if someone hadn’t done that for polio, we would today be in the business of building better and better iron lungs. We do not want to be in the equivalent business of building better iron lungs.

The mission of CRI is to “Advance the Science of Care”. We in CRI believe the future will depend on the successful development and implementation of research-based treatments and using electronic health records to deploy that information. We do primary research, often with

leading academic researchers, to find effective treatments for mental health and substance use disorders. Since 2003, we have been awarded over $50M in federal and private funding.

Research Based Health IT

I'm sure many of you are familiar with the terms "Electronic Health Record" and "Electronic Medical Record." For many people, including many healthcare providers, this is often taken to mean electronic recapitulations of paper documents that have been used for the last thirty years. I am not here to discuss that since merely "electronifying" a paper system has no correlation to positive health outcomes and misses the real opportunity in such systems. As someone once said, "When you automate a mess, what you get is a very fast mess." Rather, I am here to talk to you about the promise of research-based Health IT systems that are interoperable with other providers' systems, that use clinical decision support, and that use advanced data warehousing and analytical technology to continuously improve the caliber of the clinical decision support.

CRI Experience

CRI has been incredibly fortunate to be the benefactor of farsighted leadership of several philanthropists who support our vision of research-based clinical decision-making. With their support, with the encouragement of our Board of Directors, and with the hard work of some incredibly talented people in CRI, we have been able to develop the infrastructure for advanced health care technology. While we have only been doing this for a few years, we have had some significant success thus far and were recently awarded The Data Warehousing Institute's 2010 Best Practices award for data warehousing and business intelligence.

Many of you are familiar with the stated promise of Health Information Technology (Health IT). Indeed, the recent national commitment to this technology evidenced in the HiTech Act reflects the importance of moving all citizens to Electronic Health Records. This goal, first promoted by President George W. Bush and now supported by President Obama, is the right thing to do for many reasons.

At the risk of "preaching to the choir", I would like to comment about some of the advantages that can accrue to organizations if they implement Health IT, and I would like to point out some of the successes we have enjoyed in our organization.

<u>Health IT saves money.</u> Nationally, the RAND Corporation has estimated electronic records can save $77B per year just by improving efficiency. At Centerstone, we have been affected by cuts in funding for services, as has much of the rest of the United States. Because we already had a functional Electronic Health Record, we were able to provide sophisticated analytical tools to the senior management of our sister corporation, Centerstone of Tennessee. Under the leadership of its CEO, Dr. Bob Vero, that team was able to make clinical and administrative decisions that improved productivity and assured that the maximal number of people would still be seen while simultaneously adjusting to a multi-million dollar cut. As we speak, our other sister company, Centerstone of Indiana, is bracing for many of the same cuts.

In addition, we have experienced significant savings in Medicaid recoupment in the past because the Electronic Record will not allow erroneous coding of services and subsequent erroneous billings.

Health IT improves care. Or more precisely, it can improve care if automating the record is linked to a shift to research-based treatments and clinical decision support systems. Too often, Electronic Records are implemented in ways that do not take advantage of these systems' unique capabilities. It is now physically impossible for clinicians of any ilk to stay on top of the research in their respective disciplines. In behavioral healthcare, for example, it's been said that the half-life of psychological knowledge is six years. So, if you knew all there was to know today about effective psychological treatments, half of that knowledge would be obsolete in six years. The traditional mechanism for continuing education does not and cannot stay ahead of this curve. But this is precisely what computerized records systems can do uniquely well - by providing information in the form of prompts and reminders that cue the provider to what the research shows is most effective today. Functionality like this is called Clinical Decision Support. Note that the goal here is decision support not decision-making. Decisions should always be left in the hands of the clinician and the patient but the electronic record can provide current research information that allows clinicians and patients to make better decisions.

Sometimes, simple things are hard to accomplish in paper-based systems. In our industry, 50% of consumers are diagnosed inaccurately the first time and studies by the National Institutes of Health and the RAND Corporation have shown that over 70% of our consumers are not receiving the most appropriate care for their conditions. With research-based Health IT, consumers can have a 98% chance of an accurate diagnosis from the beginning, saving months of ineffective, costly, and inappropriate treatment.

I'm sure the term "Evidence Based Treatment" is familiar to some of you. Evidence Based Treatments are protocolized, research-based interventions that, when implemented correctly, provide positive treatment outcomes for the maximal number of patients. Evidence Based Treatments are popular in all of health care, including behavioral healthcare, and though their efficacy is debated in some camps of our field, what we do know is: 1) they are very difficult to implement with high fidelity to the original model, and 2) under the best of circumstances, they inform clinicians about "what works best for most," --- but not all.

At CRI, we have had some success moving beyond Evidence Based Treatments to the next level of individualized research-based interventions. Using data mining and statistical analytical tools, we have done pilot work in the area of predictive modeling that allows us to predict, at the first encounter, what treatments will be most effective for this individual. This is exciting stuff because it takes us into the realm of personalized medicine. Instead of assuming the gold standard in treatment is "what works best for most", we can offer "what works best for you." Aside from the obvious advantages of personalizing care, it has the added benefit of inherently improving over time as the decision algorithms are enhanced so that instead of the 70% of our clients that currently benefit from this approach, we believe the percent could ultimately get into the 90's. Also, because these technologies get better over time, that is, the treatment

recommendations get better and better, we can also address another major problem in healthcare – the 17-year science to service gap.

The way we currently conduct clinical research is slow, and it takes a long time for the results to land on clinicians' desktops. We aren't advocating abandoning traditional research. Rather, we believe it prudent to also use the power of Health IT to conduct rapid cycle, *in vivo* research of the data to see what is working and what is not and feed that information back to clinicians via the Electronic Record.

Health IT makes integrated care possible. Arguably, one of the best benefits of Health IT will not occur in the doctor's office but in the ability of clinicians to electronically communicate about shared patients. We all know people whose healthcare was compromised because Dr. A didn't know what Dr. B was doing for the patient they shared. Problems like drug-drug interactions, duplicate tests, and other problems evaporate when providers can communicate and share clinical data. In today's parlance, this is called "Interoperability," and it may, in the long run, be the biggest improvement in healthcare in this country. However, as a friend of mine pointed out, "You have to become operable before you can become interoperable."

As you know, many people consider mental health issues to be relatively minor in the grand scheme of healthcare and support funding them "if there is money left over." It is an unfortunate truth that the importance and relevance of these disorders to all of health care are still minimized. This could not be further from the truth. For example:

- Persons with serious mental illness like schizophrenia die 25 years younger than their non-mentally ill counterparts not because of their mental illness but because of heart disease, diabetes, and respiratory ailments such as pneumonia.
- Depression and anxiety top the lists of the most common and most costly diseases in the US.
- According to The World Health Organization, depression is now the number one source of disease burden in middle and high-income countries (like the US).
- 50% of all mental health care in the United States is delivered by primary care providers, not mental health professionals, not because they want to.

All this points to the value, no, the necessity, for behavioral healthcare providers to be "at the table" with our medical peers. And yet, this is exactly what cannot happen under the current HITECH legislation.

As you well know, community mental health centers, private psychiatric hospitals, specialty addictions treatment centers and non-medical behavioral health providers were explicitly excluded from the Medicare and Medicaid stimulus reimbursement in the HITECH Act that was meant to encourage Electronic Health Record adoption. I mentioned in my introduction that the Centerstone companies employ nearly 2200 people and that we do not provide inpatient services. Instead, we work with local specialty hospitals, general hospitals with psychiatric services and state hospitals to provide those services. Of the 2200 Centerstone employees, about 1500 are clinicians and of those, only 38 are physicians and 46 are Nurse Practitioners

who can prescribe independently, many of whom are part time. Under the current regulations, only the physicians and the nurse practitioners are eligible for the stimulus reimbursement. So, 94% of our clinical staff are ineligible – even though any Electronic Health Record must be used by all clinical staff to be effective. You can see what this does internally, but consider what this means in terms of Interoperability. Not only are the Centerstone companies ineligible as organizations, so are private psychiatric hospitals and specialty addictions providers. Worse yet, given the high comorbidity of medical and mental health diagnoses, we would be unable to communicate with private physicians and general hospitals about patients we share. In truth, this is not an issue for Centerstone per se since we will be building out our EHR to meet the specifications outlined in the HITECH legislation. But we are the exception. Most organizations like ours cannot do what we've done, and it is for them that I am here today.

This problem can be remedied. The promise of what is possible as demonstrated at Centerstone can be realized nationally with your support of House Resolution 5040, *The Health Information Technology Extension for Behavioral Health Services Act of 2010*. This Act will make mental health centers, private psychiatric hospitals, specialty addiction providers and some non-medical mental health professionals eligible for the HITECH stimulus funding. If you have not yet signed on as a cosponsor to this legislation, I implore you to do so and to urge your colleagues to do so as well. It is the only way we can prevent behavioral healthcare from becoming electronically orphaned. Our national vision for interoperability will not be realized unless this critical component is included. For just as there can be no healthcare without mental healthcare; there can be no interoperable Health IT without behavioral health IT. Thank you.

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